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## **QUESTIONS AND ANSWERS**

### **Exposure**

Q: My home has not been cleaned up. Is the dust in my house a source of exposure and concern?

A: Source exposures (such as dust, visible vermiculite, and contaminated soils) continue to be a concern for EPA. Under Emergency Removal Action, EPA is cleaning homes with dust levels greater than 5,000 s/cm<sup>2</sup>. EPA continues to evaluate exposures that may occur at lower levels. In the interim, we recommend doing anything you can to keep sources out of your living area, such as wet mopping/wiping of hard surfaces, avoiding transport of dust into your home on shoes, clothing, etc, and using a HEPA vacuum for carpets and fabrics.

Q: My home was cleaned up. How do I know it is safe? Is there remaining dust/contamination in my home that is a source of exposure and concern?

A: EPA continues to strive to reduce ongoing exposure throughout the community and in individual homes. Six hundred and fifty (??) homes have been addressed so far, and we are committed to moving forward at a rate of 200 homes per year. EPA continues to evaluate exposures that may occur at lower levels.

Q: Is the vermiculite insulation inside my walls a source of exposure and concern?

A: Vermiculite that is contained inside walls is not an open source of contamination and therefore exposure is limited. However, if you decide to do any remodeling or renovation where the vermiculite is no longer contained, then there could be a potential exposure. Proper action must be taken prior to any work that could possibly cause releases of vermiculite that is currently contained within the walls.

Q: Are the ducts in my house a source of ongoing exposure and concern?

A: EPA has not addressed this issue directly, but we are evaluating dust levels in homes that have already been addressed under Post Emergency Response Cleanup actions to determine if recontamination may be occurring. If I were a property owner, this response is not so reassuring. Is there anyway we can summarize the results we are collecting to determine if recontamination is occurring or not occurring?

Q: Is the dust that's present under carpets a source of asbestos in my home? Is my carpet an ongoing source of exposure and concern?

A: Insert conclusions of Tech memo 10. EPA continues to evaluate dust levels in homes that have already been addressed under Post Emergency Response Cleanup actions to determine if recontamination may be occurring. Can we say something about if homeowners remove the original flooring/carpeting, precautions should take place so that recontamination does not occur?

Q: My kids play in rooms that have visible vermiculite. Is this a concern?

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A: This represents a potentially open source. Source exposures continue to be a concern for EPA. Reference Living with Vermiculite Fact Sheet. Please contact EPA for further discussion/investigation.

Q: Should I be concerned about asbestos being present in the dust generated when I groom my dog/cat/horse/other pet?

A: EPA has not addressed this issue directly, but we are evaluating dust levels in homes that have already been addressed under Post Emergency Response Cleanup actions to determine if recontamination may be occurring. In the interim, we recommend doing anything you can to keep sources out of your living area, such as wet mopping/wiping of hard surfaces, avoiding transport of dust into your home on shoes, clothing, etc, and using a HEPA vacuum for carpets and fabrics. This doesn't really address what to do with a horse since the horse is outside and does not come into the living space of the home. Should people try to use wet brushes when grooming a horse to reduce the levels of dust? Are we concerned with areas where horses might be (like barns, outside stalls, etc)?

Q: Is it safe for my pet to come into my house?

A: EPA has not addressed this issue directly, but we are evaluating dust levels in homes that have already been addressed under Post Emergency Response Cleanup actions to determine if recontamination may be occurring. In the interim, we recommend doing anything you can to keep sources out of your living area, such as wet mopping/wiping of hard surfaces, avoiding transport of dust into your home on shoes, clothing, etc, and using a HEPA vacuum for carpets and fabrics. Can we say something like "If people suspect that they have visual vermiculite close to their home or business, they should limit exposure of their pet to the outside in case it does bring in sources of dust that may contain asbestos?" Or another way to reduce potential exposures is to frequently bathe pets that do spend a lot of time outdoors.

Q: Can the tree bark on logs I bring into my house for firewood contaminate (or recontaminate) my indoor spaces?

A: EPA has not addressed this issue directly, but we are evaluating dust levels in homes that have already been addressed under Post Emergency Response Cleanup actions to determine if recontamination may be occurring. In the interim, we recommend doing anything you can to keep sources out of your living area, such as wet mopping/wiping of hard surfaces, avoiding transport of dust into your home on shoes, clothing, etc, and using a HEPA vacuum for carpets and fabrics. Also, shouldn't we say something about getting firewood in areas further away from the mine itself since it is likely that tree bark closer to the mine would be the most contaminated?

Q: Is it safe to burn firewood?

A: See Q and A for tree bark (Bonnie?)

Q: My kids play outside in areas (around the house, public areas, etc) with visible vermiculite. Is this a concern?

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A: This represents a potentially open source. Source exposures continue to be a concern for EPA. Reference Living with Vermiculite Fact Sheet. Please contact EPA for further discussion/investigation.

Q: My driveway has vermiculite on it and my kids play on it. Is this a concern?

A: This represents a potentially open source. Source exposures continue to be a concern for EPA. Reference Living with Vermiculite Fact Sheet. Please contact EPA for further discussion/investigation.

Q: My kid walks to school every day along the rail line. Is it safe for her to do so?

A: EPA has not addressed this issue directly in OU4, but this pathway will be considered in OU3. We should define the OUs since not everyone will know what they are.

Q: Is it safe for my kid to climb trees?

A: EPA recognizes that researchers at the University of Montana have collected data that indicates asbestos can be present in tree bark. Interpretation of their data with respect to this pathway is not possible at this time (Why? We need to explain this further). EPA stresses that physical hazards associated with this activity also exist.

Q: My garden was/was not cleaned up. Is it safe to garden there?

A: Gardens continue to be an area of special concern for EPA because of intentional usage of vermiculite as a soil amendment and the potential for frequent activity and high levels of soil disturbance. Gardens that required removal were replaced with clean fill dirt that was tested before placement. (what was the depth that we cleaned these gardens to?) We need to address those gardens that have not been cleaned up yet. Shouldn't we say that for those that have not been cleaned up people should restrict activities on the soils prior to knowing what the levels of contamination might be?

Q: I recently saw MDOT workers along Highway 37 wearing masks while mowing the grass on the shoulder. Is it safe for me to mow my lawn?

A: Source exposures (such as dust, visible vermiculite, and contaminated soils) continue to be a concern for EPA. Activities that disturb contaminated soils (such as digging and mowing) may release airborne fibers depending on the nature of the disturbance, level of contamination, and environmental conditions. We need to say that MDOT workers are also being individually monitored to determine if the mowing activities along the shoulder of Highway 37 are indeed exposing them to levels that are unsafe. If not, then masks may not be required for future activities.

Q: Is it safe to burn the tree stump in my yard?

A: EPA recognizes that researchers at the University of Montana have collected data that indicates asbestos can be present in tree bark. Interpretation of their data with respect to this pathway is not possible at this time (again, why?). County restrictions on burning should also be considered. Can we say something about "Burning trees that might have asbestos fibers in the bark could potentially release these fibers into the air. Fire itself will not destroy asbestos fibers, right?"

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Q: Is it safe to reuse building materials, say, from a deck or building that's been torn down (tearing down activities and sawing/hammering/etc during rebuilding)?

A: EPA has not addressed this issue directly. If building materials are contaminated, they may be considered a potential source of exposure, both in the process of reutilization of the material and in the rebuilt structure itself. Thus, if you suspect that the materials are contaminated, it may be best not to reuse the materials and instead dispose of them properly.

Q: I understand concrete may contain asbestos. Is there asbestos present in the dust that's released when concrete is "busted up," and do I need to be concerned about it?

A: EPA has not addressed this issue directly. Contaminated concrete may represent a potential source of exposure. Therefore, if you suspect that the concrete is contaminated, proper procedures should be followed prior to busting up the concrete.

Q: I drive around the area on dusty roads a lot and my truck is pretty dusty inside. Is the dust in my vehicle a concern?

A: EPA has not addressed this pathway, but it will be considered in future sampling programs. If someone suspects that the dust might be contaminated in their vehicle, is there an easy way for a person to do a wipe sample and bring it to us or somewhere else to determine the level of fibers in the dust of their car? Or would it be too expensive to do this?

Q: My 16-year-old inherited his grandpa's car, and his grandpa used to work at the mine. Is it contaminated with LA and should I be concerned about him driving it?

A: EPA has not addressed this pathway, but given the history of the vehicle, source material may be present. We recommend doing a thorough cleaning the interior (e.g., HEPA vacuuming, wet wiping, etc.).

Q: Is it safe to blow out the air filters in my car and reuse them?

A: We recommend following the manufacturers' guidelines for air filter replacement.

Q: Is asbestos released when roads are ground down in preparation for resurfacing?

A: EPA plans to address this pathway in OU3. (Again, we should define this OU since not everyone will know. Also, in the meantime should we recommend that when this occurs, officials should consider wetting down the surfaces so that dust is minimized?)

Q: I ride my four-wheeler/bicycle/ATV in areas around the mine and Stimson Lumber area. Is this a concern?

A: Need Peggy's input regarding data from air monitoring during events in these areas.

Q: I regularly fish along the river. Is this a concern?

A: EPA has not addressed this pathway. Recreational activities along the river will be considered in future data collection efforts.

Q: What about game (elk, deer, moose), garden vegetables, berries, and/or mushrooms gathered from areas within the airshed? Are the vegetables from my garden safe?

A: Inhalation of LA particles in air is the primary exposure pathway of concern in Libby. Compared to exposure by inhalation, exposure to LA by ingestion of contaminated soil, sediment, dust, water, and/or game are currently considered a lesser concern. Lesser concern meaning what exactly? They don't have to worry about it or they do?

### **Methodology**

Q: What does it mean when EPA says the soil in my yard is ND for LA?

A: For reported values which were collected under the CSS and PDI (PLM-VE method), ND signifies a non-detect at a level of 0.2% by weight for LA. Can we define this further? For example, should define CSS, PDI, PLM-VE, etc. It would be good for us to further define what it means if the level is 0.2% by weight for LA.

### **Broader questions**

Q: Will EPA address ingestion pathways in the future?

A: EPA has focused its attention on inhalation of LA particle in air because we consider this exposure route more significant than exposure to LA by ingestion of contaminated soil, sediment, dust, water, and/or game. What is our rationale behind this? We can say that past studies of asbestos have shown that inhalation is the main route of exposure whereas ingestion does not seem to be as concerning.

Q: There are several pathways identified on the CSM that are not supported by quantitative data. What are EPA's plans to address those data gaps?

A: EPA recognizes that data gaps exist. We are currently in the process of reviewing all data present in our database so that we can identify all potential data gaps which will be considered in future sampling efforts.

Q: How can EPA quantify cumulative exposure when not all of the exposure pathways are supported by quantitative data?

A: We can't - that is why we are planning to collect more data. We plan to obtain as much quantitative data as possible but may also rely on qualitative information to support our analysis.

Q: How can EPA issue a ROD when not all of the exposure pathways are supported by quantitative data?

A:

Q: When and how will data gaps in the CSM be identified and addressed?

A: EPA recognizes that data gaps exist. We are currently in the process of reviewing all data present in our database so that we can identify all potential data gaps which will be considered in future sampling efforts.

Q: What is EPA doing to ensure adequate data quality in the BRA?

A: EPA has an extensive data quality assurance program that ensures high quality data from the collection point in the field, to the analysis in the lab, to ultimate repository in the database. For example, we perform routine field and laboratory audits, and incorporate field and laboratory quality control samples in our sampling plans.

**Property Cleanups**

Q: In what percentage of the properties cleaned to date do the property owners have continuing difficulties?

A:

Q: How many properties cleaned to date have had post-cleanup sampling?

A:

Q: Is the post-property cleanup sampling done by an independent entity?

A:

Q: Does EPA guarantee that property cleanups will be done right?

A:

Q: Areas of a contaminated property designated as non-use are not cleaned. How are these designations made?

A:

Q: Isn't it cost-effective to clean all contamination the first time rather than leaving some and having to come back to it later to remove it?

A:

Q: How can the community guide EPA's property restoration efforts?

A:

Q: Is EPA aware that the community's confidence in the property cleanups is lagging?

A:

Q: What is EPA doing to restore community confidence?

A:

Q: Would EPA support the formation of a cleanup support group, i.e., a group of people to meet and discuss property cleanup issues?

A:

Q: Of the 616 properties cleaned to date, how many have completed the post-cleanup survey?

A:

Q: What is the average per property cost of cleanup?

A:

Q: Shouldn't there be a penalty for EPA missing cleanup deadlines?

A:

**Troy**

Q: When will Troy be addressed?

A:

Q: Why hasn't the cleanup of Troy schools been conducted under the emergency response authority?

A:

**Mine**

Q: The mine, mill, and tailings are open to the elements. Why isn't it being cleaned now?

A:

Q: When will the mine be investigated?

A:

Q: Will Grace be in charge of cleaning up the mine?

A:

Q: Can wind-borne dispersion of asbestos from the mine recontaminate my cleaned-up property?

A:

Q: Are there any plans for air monitoring?

A:

**Economic Impact**

Q: Would EPA please publish the amount of money it has spent within the city, the county, and the surrounding area?

A:

Q: What is EPA's present payroll in Libby?

A:

**Other**

Q: Are NEIC or any other criminal investigators going to be coming to Libby?

A: NEIC or other criminal investigators may be coming to Libby but we have not been told the specifics of when they will be here or whom they will speak to because the details of criminal investigations are not known even to us. If you have questions about this topic, please contact Special Agent Lori Hansen at (xxx) xxx-xxxx.

Q: Why hasn't animal laboratory testing been done to establish the toxicity of Libby amphibole?

A:

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Q: Why is EPA now saying a ROD won't be completed this year? I thought that's what all the work being done over the past several years has been working towards. Why the delay?

A: